

IN THE CLAIMS:

This listing of claims replaces all prior versions, and listings, of claims in the application:

Claim 1 (Currently amended). An injectable [[A]] radiosensitizer pharmaceutical composition ~~medicament~~ for intracorporeal application, ~~the medicament~~ consisting of a sodium or potassium salt of a halogenated xanthene in a pharmaceutical delivery vehicle ~~as the radiodense active component~~, wherein said pharmaceutical composition ~~medicament~~ is for high energy phototherapeutic treatment, using applied ionizing radiation having an energy of greater than approximately 1 KeV, of cancerous, pre-cancerous, and infectious diseases of human and animal tissue, and provided that said halogenated xanthene does not contain a radioisotope.

Claim 2. (Currently amended) The pharmaceutical composition ~~medicament~~ of claim 1 wherein said halogenated xanthene is present in a concentration of greater than about 0.001% to less than about 20%.

Claim 3 (Currently amended). The pharmaceutical composition ~~medicament~~ of claim 1 wherein said halogenated xanthene is Rose Bengal.

Claim 4 (Currently amended). The pharmaceutical composition ~~medicament~~ of claim 1 wherein said halogenated xanthene is 4,5,6,7-Tetrabromoerythrosin.

Claim 5 (Currently amended). The pharmaceutical composition ~~medicament~~ of claim 1 wherein said halogenated xanthene is a compound selected from the group consisting of 4',5'-Dichlorofluorescein; 2',7'-Dichlorofluorescein; 4,5,6,7-Tetrachlorofluorescein; 2',4',5',7'-Tetrachlorofluorescein; Dibromofluorescein; Solvent Red 72; Diiodofluorescein; Ethyl Eosin; Erythrosin B; Phloxine B; Rose Bengal; 4,5,6,7-Tetrabromoerythrosin; Mono-, Di-, or Tribromoerythrosin; Mono-, Di-, or Trichloroerythrosin; Mono-, Di-, or Trifluoroerythrosin; 2',7'-Dichloro-4,5,6,7-Tetrafluorofluorescein; 2',4,5,6,7,7'-Hexafluorofluorescein; and 4,5,6,7-Tetrafluorofluorescein.

Claims 6-10. (Canceled)

Claim 11 (Currently amended). The pharmaceutical composition ~~medicament~~ of claim 1 wherein said pharmaceutical composition ~~medicament~~ is for the treatment of diseases of the skin, diseases of the mouth and digestive tract, diseases of the urinary and reproductive tracts, diseases of the respiratory tract, diseases of the circulatory system, diseases of the head and neck, diseases of the endocrine and lymphoreticular systems, diseases of connective tissues, and diseases of tissue surfaces exposed during surgery.

Claim 12. (Currently amended) The pharmaceutical composition ~~medicament~~ of claim 1 wherein said applied ionizing radiation is applied x-ray irradiation.

Claim 13. (Currently amended) The pharmaceutical composition medicament of claim 1 wherein said applied ionizing radiation is applied gamma irradiation.

Claim 14 (Currently amended). The pharmaceutical composition medicament of claim 1 wherein said applied ionizing radiation has an energy of ~~greater than approximately 1 KeV and less~~ than approximately 1000 MeV.

Claim 15. (Canceled)

Claim 16 (Currently amended). Use of a sodium or potassium salt of a halogenated xanthene as the active ~~radiodense~~ component in a pharmaceutical delivery vehicle, for preparation of ~~[[in]]~~ an intracorporeal radiosensitizer medicament for high energy phototherapeutic treatment of cancerous, pre-cancerous, and infectious diseases of human and animal tissue using applied ionizing radiation having an energy of greater than approximately 1 KeV, provided that said halogenated xanthene does not contain a radioisotope.

Claim 17 (Currently amended). The use of claim 16 wherein said ~~for preparation of a~~ medicament is for the treatment of diseases of the skin diseases of the mouth and digestive tract, diseases of the urinary and reproductive tracts, diseases of the respiratory tract, diseases of the circulatory system, diseases of the head and neck, diseases of the endocrine and lymphoreticular systems, diseases of connective tissues, and diseases of tissue surfaces exposed during surgery.

Claim 18 (Previously presented). The use of claim 16 wherein said halogenated xanthene is Rose Bengal.

Claim 19 (Previously presented). The use of claim 16 wherein said halogenated xanthene is 4,5,6,7-Tetrabromoerythrosin.

Claim 20 (Previously presented). The use of claim 16 wherein said applied ionizing radiation is x-ray irradiation.

Claim 21 (Previously presented). The use of claim 16 wherein said applied ionizing radiation is gamma irradiation.

Claim 22 (Currently amended). Intracorporeal use of a radiosensitizer medicament consisting of a sodium or potassium salt of a halogenated xanthene formulated in a pharmaceutical delivery vehicle for high energy phototherapeutic treatment comprising:

administering said ~~[[a]]~~ radiosensitizer medicament ~~consisting of a halogenated xanthene~~ into or proximate to human or animal tissue and irradiating ~~the halogenated xanthene present within or proximate to~~ said tissue with applied ionizing radiation having an energy of greater than approximately 1 KeV, provided that said halogenated xanthene does not contain a radioisotope.

Claim 23 (Previously presented). The use of claim 22 wherein said halogenated xanthene is Rose Bengal.

Claim 24 (Previously presented). The use of claim 22 wherein said halogenated xanthene is 4,5,6,7-Tetrabromoerythrosin.

Claim 25. (Previously presented) The use of claim 22 wherein said applied ionizing radiation is x-ray irradiation.

Claim 26. (Previously presented) The use of claim 22 wherein said applied ionizing radiation is gamma irradiation.

Claim 27. (Currently amended) The use of claim 22 wherein said radiosensitizer medicament contains said halogenated xanthene ~~[[is]]~~ at a concentration of greater than approximately 0.001% to less than approximately 20%.

Claim 28. (Currently amended) The use of claim 22 wherein said administering comprises ~~a use of~~ a route of administration selected from the group consisting of intravenous injection, intraperitoneal injection, intramuscular injection, intracranial injection, intratumoral injection, intraepithelial injection, transcutaneous delivery, per oesophageal administration, intraabdominal administration, intraappendicular administration, intraarterial administration, intraarticular administration, intrabronchial administration, intrabuccal administration, intracapsular administration, intracardial administration, intracartilaginous administration, intracavitary administration, intracephalic administration, intracolic administration, intracutaneous administration, intracystic administration, intradermal administration, intraductal administration, intraduodenal

administration, intrafascicular administration, intrafat administration, intrafilar administration, intrafissural administration, intragastric administration, intraglandular administration, intrahepatic administration, intrainestinal administration, intralamellar administration, intralesional administration, intraligamentous administration, intralingual administration, intramammary administration, intramedullary administration, intrameningeal administration, intramyocardial administration, intranasal administration, intraocular administration, intraoperative administration, intraoral administration, intraosseous administration, intraovarian administration, intrapancreatic administration, intraparietal administration, intrapelvic administration, intrapericardial administration, intraperineal administration, intraperitoneal administration, intraplacental administration, intrapleural administration, intrapontine administration, intraprostatic administration, intrapulmonary administration, intrarachidian administration, intrarectal administration, intrarenal administration, intrascleral administration, intrascrotal administration, intrasegmental administration, intrasellar administration, intraspinal administration, intrasplenic administration, intrasternal administration, intrastromal administration, intrasynovial administration, intratarsal administration, intratesticular administration, intrathoracic administration, intratonsillar administration, intratracheal administration, intratubal administration, intratympanic administration, intraureteral administration, intraurethral administration, intrauterine administration, intravaginal administration, intravascular administration, intraventricular administration, intravertebral administration, intravesical administration, and intravitreous administration.

Claim 29 (Currently amended). A radiosensitizer pharmaceutical composition for intracorporeal administration, consisting of a sodium or potassium salt of a halogenated xanthene

as the active component in a pharmaceutical delivery vehicle, for high energy phototherapeutic treatment using applied ionizing radiation having an energy of greater than approximately 1 KeV, provided that said halogenated xanthene does not contain a radioisotope.

Claim 30. (Previously presented) The pharmaceutical composition of claim 29 wherein said halogenated xanthene is present in a concentration of greater than about 0.001% to less than about 20%.

Claim 31 (Previously presented). The pharmaceutical composition of claim 29 wherein said halogenated xanthene is Rose Bengal.

Claim 32 (Previously presented). The pharmaceutical composition of claim 29 wherein said halogenated xanthene is 4,5,6,7-Tetrabromoerythrosin.

Claim 33 (Previously presented). The pharmaceutical composition of claim 29 wherein said halogenated xanthene is a compound selected from the group consisting of 4',5'-Dichlorofluorescein; 2',7'-Dichlorofluorescein; 4,5,6,7-Tetrachlorofluorescein; 2',4',5',7'-Tetrachlorofluorescein; Dibromofluorescein; Solvent Red 72; Diiodofluorescein; Ethyl Eosin; Erythrosin B; Phloxine B; Rose Bengal; 4,5,6,7-Tetrabromoerythrosin; Mono-, Di-, or Tribromoerythrosin; Mono-, Di-, or Trichloroerythrosin; Mono-, Di-, or Trifluoroerythrosin; 2',7'-Dichloro-4,5,6,7-Tetrafluorofluorescein; 2',4,5,6,7,7'-Hexafluorofluorescein; and 4,5,6,7-Tetrafluorofluorescein.

Claims 34-35. (Canceled)

Claim 36. (Previously presented) The pharmaceutical composition of claim 29 wherein said pharmaceutical composition is formulated in a delivery vehicle selected from the group consisting of liquids, semisolids, solids and aerosols.

Claim 37. (Previously presented) The pharmaceutical composition of claim 36 wherein said vehicle is selected from the group consisting of aqueous suspensions, non-aqueous suspensions, solutions, creams, ointments, gels, syrups, suppositories, tablets, capsules and micro-droplet sprays.

Claim 38. (Previously presented) The pharmaceutical composition of claim 29 wherein said halogenated xanthene is in a delivery vehicle that includes an adjuvant selected from the group consisting of builders, stabilizers, emulsifiers, dispersants, preservatives, buffers, electrolytes, tissue penetrating agents and tissue softening agents.

Claim 39. (Previously presented) The pharmaceutical composition of claim 29 wherein said applied ionizing radiation is x-ray irradiation.

Claim 40. (Previously presented) The pharmaceutical composition of claim 29 wherein said applied ionizing radiation is gamma irradiation.

Claims 41-45 (Canceled)

Claim 46 (Currently amended). An intracorporeally-applicable radiosensitizer medicament consisting of a sodium or potassium salt of a halogenated xanthene as the radiodense active component in a pharmaceutical delivery vehicle, wherein said medicament is for high energy phototherapeutic treatment, using applied ionizing radiation having an energy of greater than approximately 1 KeV, of human and animal tissue, and provided that said halogenated xanthene does not contain a radioisotope.

Claim 47 (Currently amended). A radiosensitizer pharmaceutical composition for intracorporeal administration consisting of a dosage unit of a sodium or potassium salt of a halogenated xanthene in a pharmaceutical delivery vehicle suitable for radiosensitization using applied ionizing radiation having an energy of greater than approximately 1 KeV, provided that said halogenated xanthene does not contain a radioisotope.

Claim 48. (Previously presented) The pharmaceutical composition of claim 47 wherein said applied ionizing radiation is x-ray irradiation.

Claim 49. (Previously presented) The pharmaceutical composition of claim 47 wherein said applied ionizing radiation is gamma irradiation.

Claim 50. (Previously presented) The pharmaceutical composition of claim 47 wherein said halogenated xanthene is Rose Bengal.